

## Bumblebee Aware for June - 2021

When the hotter weather arrived this month, it transformed our gardens and hedges into a visual feast of colours and shapes. It also brought out a kaleidoscope of pollinators including bumblebees, butterflies, solitary bees, and hoverflies. Among these there were cuckoo bumblebees.

We have six species of these cuckoos in the UK and they take over the nests of many of our local true, or social bumblebees. The cuckoo queen hibernates in the winter and emerges a few weeks after the social queen has set up a colony where there are some dozens of workers already collecting pollen and nectar. The cuckoo enters the nest, kills the host queen and her developing larvae, and then lays her own eggs. She cannot produce the wax needed to make brood cells and so uses existing ones. She relies on the host workers to care for her offspring but these will only develop as queens or breeding males.

She is able to take over a colony because she is bigger, and has a thicker body wall, than the defending host workers that will try to sting her to death. However, if she attacks a nest too early, there will be insufficient workers to look after her progeny, too late and there will be too many workers to fight her off. Some cuckoos will avoid detection for a few days by keeping a low profile in the nest until they acquire the smell of the resident bees.



The biggest bumblebee that we see in this area is the **Red-tailed cuckoo bee**. She looks longer than our typical social bumbles, is all black apart from a cherry red or orange tail, and has smokey-dark wings. The cuckoos have no pollen sacs and collect neither nectar nor pollen to feed the colony. As a result, they can live a leisurely life in the slow lane once they have laid enough eggs. Males are particularly lazy and can often be seen asleep on thistles etc. Cuckoos leave all of the work to the host bees.

Another highly visible cuckoo bee, also larger than most social bumbles, is the **Southern cuckoo**. They are black with an orange band behind the head, and a very obvious white tail that has a bright yellow spot on each side in front of it. They feed on composite flowers like wild parsnip, knapweed, dandelion, and thistles. This species is quite common in this area and several can be seen feeding together on the same head of plants like hogweed.



Figures suggest that about half of the social bee colonies fall victim to these invasions, the cuckoos often following the host bee as she finishes foraging and heads for the nest. Cuckoos have also been seen flying low to the ground looking for nests in suitable habitats. It is believed that the presence of cuckoo bees is only possible if there are enough colonies of social bumblebees around and so the approach of nature-lovers is to live and let live.